

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 February 2004 (19.02.2004)

PCT

(10) International Publication Number
WO 2004/014877 A1

(51) International Patent Classification⁷: **C07D 249/08**,
405/12, 491/052, 403/06

ES, FI, FR, GB, GR, HU, IE, IT, I.U., MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(21) International Application Number:
PCT/IB2003/003540

Declarations under Rule 4.17:

(22) International Filing Date: 5 August 2003 (05.08.2003)

— as to the identity of the inventor (Rule 4.17(i)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
P-200201874 7 August 2002 (07.08.2002) ES

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— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

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— as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations of inventorship (Rule 4.17(iv)) for US only

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Published:

— with international search report

(81) Designated States (national): AE, AG, AI, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, IIR, IU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,

(54) Title: **PROCESS FOR PREPARING RIZATRIPTAN**

(57) Abstract: In particular, rizatriptan or a pharmaceutically acceptable salt thereof, which includes a) Preparation of the diazonium salt of the aniline hydrochloride (II); followed by reduction and acidification to give the hydrazine (III); b) reaction in situ of the hydrazine hydrochloride (III) with α -keto- δ -valerolactone, to give the hydrazone (IV); c) Fischer indole reaction of the hydrazone (IV), to give the pyranindolone (V), optionally followed by a hydrolysis reaction to give (VI); d) Transesterification of (V) or esterification of its hydrolysis product (VI), to give (VII), where R means straight or branched C1-C4 alkyl chain; e) Conversion of the hydroxyl group of (VII) into dimethylamino, to give the indolecarboxylate (VIII), where R has the meaning defined above; f) Saponification of the 2-carboalkoxy group of (VIII) to give indolecarboxylic acid (IX); and g) Decarboxylation of the indolecarboxylic acid (IX) to give rizatriptan and, eventually, to obtain a pharmaceutically acceptable salt thereof. The invention also relates to synthesis intermediates to obtain rizatriptan.

WO 2004/014877 A1

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INTERNATIONAL SEARCH REPORT

PCT/IB 03/03540

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D249/08 C07D405/12 C07D491/052 C07D403/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 01 34561 A (KNOLL AKTIENGESELLSCHAFT) 17 May 2001 (2001-05-17) page 4 -page 10, line 2	1-7
Y	WO 98 06725 A (MERCK & CO., INC) 19 February 1998 (1998-02-19) cited in the application page 5 -page 11 page 41 -page 44; examples 2,4-7,10,12-15	1-7, 10-13
Y	WO 94 02476 A (MERCK SHARP & DOHME LIMITED) 3 February 1994 (1994-02-03) page 19 -page 23; claims 1-10	1-7
Y	EP 0 497 512 A (MERCK SHARP & DOHME LIMITED) 5 August 1992 (1992-08-05) cited in the application page 36 -page 48; claims 1-6	1-13
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☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

19 November 2003

Date of mailing of the international search report

02/12/2003

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